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December 3, 2003

SECY-03-0208

FOR:

The Commissioners

FROM:

William D. Travers

**Executive Director of Operations** 

**SUBJECT:** 

ADVERSARY FOR FORCE-ON-FORCE EXERCISES AT

NRC-LICENSED FACILITIES

### PURPOSE:

To obtain Commission approval of the staff's recommendation on development and implementation of a process to ensure that a credible, well-trained, and consistent adversary is used in force-on-force (FOF) exercises at facilities licensed by the U.S. Nuclear Regulatory Commission (NRC).

#### **BACKGROUND:**

As discussed in SECY-03-0147, "Interim Lessons Learned from the Pilot Expanded Force-on-Force Exercise Program," dated August 25, 2003, and discussed with the Commission on September 11, 2003, the staff has observed a variety of adversary forces during force-on-force (FOF) exercises. In accordance with Temporary Instruction (TI) 2515/151, "Expanded Pilot Force-on-Force Exercise Evaluation," the NRC staff has overseen pilot FOF exercises at 14 licensed power reactor facilities. Adversary teams have been comprised of licensee security staff members from the facility being evaluated, security force members from other nuclear

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Exemption Number 2 Nuclear Regulatory Commission review required before public release.

Robert Prato, NSIR/DNS

Name and organization of person making determination.

Date of Determination \_\_\_\_11/21/03

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facilities, or members from a law enforcement agency (e.g., State Police Special Weapons and Tactics team). In each of the FOF exercises performed to date, the adversary forces have appeared to perform to the best of their ability. However, the staff identified recurring examples where individual adversaries or adversary teams did not adequately execute offensive tactics or mission elements that would have been expected of a credible, well trained adversary team and did not provide a realistic and credible challenge to the site physical protection plan. This lessened the effectiveness of the staff's performance assessment of the licensee's response to adversaries as defined in the Design Basis Threat (DBT). On the basis of the NRC's experience in previous and current iterations of FOF exercise programs, as well as the experience of military and other Federal agencies engaged in similar programs, the staff has developed four alternatives to the current approach. This paper describes the impact of each approach in ensuring the availability of a credible and well-trained mock adversary force for consistent application of the characteristics of the DBT in assessing licensee readiness.

The staff considered alternatives that would substantially mitigate the discrepancies and artificialities currently being observed in the pilot FOF exercises and developed the following four alternatives to the status quo (for completeness, shown as Alternative 1). These potential alternatives have been discussed with representatives of the Nuclear Energy Institute (NEI) and the industry Security Working Group. The staff wishes to obtain Commission approval for proceeding with the recommended alternative to develop and implement a process to ensure that a credible, well-trained and consistent mock adversary force is used in FOF exercises at NRC facilities. The staff considered the following five alternatives:

- 1. Continue using licensee-provided adversary forces established on an exercise-by-exercise basis (the status quo).
- 2. Establish adversary force standards and guidelines which each licensee would use to establish and train its own adversary team for use in FOF exercises at its sites.
- 3. Establish adversary force standards and guidelines for the industry as a group. The industry would select and train a pool of personnel for the adversary force code.

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- 2. Training of the adversary team;
- 3. Consistency in tactical application across the spectrum of NRC-licensed facilities; and
- 4. Impact including projected costs

### **DISCUSSION:**

The NRC has established security standards for the design, implementation, and evaluation of physical protection programs at licensed facilities. One of the primary means of assessing the licensees' ability to meet these standards is the FOF exercise program. The staff has considered a variety of alternatives to ensure that the adversary in these FOF exercises meets the primary criteria of credibility, training effectiveness, consistency in application and consideration of the impact including projected costs. The following paragraphs summarize the staff's evaluation of the alternatives against the 4 criteria stated above:

# Credibility

The current structure of mock adversary teams (Alternative 1) does not consistently meet NRC expectations. In many cases, team members have not demonstrated proficiency in the basic military or paramilitary offensive skills which a design basis adversary is expected to possess. Less than adequate execution of assignments has had a detrimental effect on the credibility of the adversary teams' performance. Examples include the delivery, emplacement, and execution of activities involving explosives.

Alternative 2 could likely achieve an acceptable degree of tactical credibility, however, the approach is subject to perceptions of conflict of interest; i.e., same licensee force versus same licensee force.

Alternative 3 would result in an adversary force that could fulfill the DBT criteria, be more tactically consistent, independent, and better trained than alternatives 1 and 2. This would meet the credibility challenge.

Alternatives 4 and 5 would develop a highly credible adversary force. With these alternatives the NRC would establish and ensure that standards and guidelines for training and selection of an adversary force would be independent and consistently meet the DBT criteria. These alternatives would enable the NRC staff to immediately address any identified credibility weaknesses or issues.

# <u>Training</u>

Alternative 1 would continue to provide the current and undesired variation in tactical and weapons-related skill levels. The adversary teams used in the current pilot program have been ad hoc in nature. As a result, team members do not consistently have the necessary time to train together to form a cohesive unit capable of proficiently executing tactics within the DBT.

Alternatives 2 and 3 would include offensive tactical training for industry participants, such as the training available from the DOE.

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Alternatives 2 through 5 would provide a level of consistency which would facilitate adequate small-unit training and increased proficiency in offensive tactics as described in the DBT.

### Consistency

Alternative 1 does not provide acceptable consistency as previously discussed and serves as the basis for the staff to develop alternative approaches for the Commission to consider.

Alternative 2, in which each licensee would establish its own adversary team, could provide the desired level of consistency across the industry provided that the written guidance was sufficient to clearly define standards and guidelines for each licensee and the licensees fully met these standards. Successful implementation of performance standards and guidelines by individual licensees would result in variations in the application of those standards and guidelines and could result in variable adversary performance. Effort at each site would be needed by the staff to ensure that standards and guidelines are appropriately implemented to prevent continued display of variations in adversary performance.

Alternatives 3 through 5 would foster the desired consistent application of DBT-based tactics. The ability to create dedicated teams not only assures the development of a well-trained mock adversary, but fosters the use of realistic tactics and credible scenarios applied consistently across the industry.

# Impact including Projected Cost

The staff considered the operational, personnel resources and cost impact of each alternative to both NRC and the licensees. Alternative 1 represents a continued level of the current effort and no additional impact to licensees or costs. Alternative 1 also represents no improvement in mock adversary performance and continued lack of a consistent, credible mock adversary for FOF exercises.

Alternative 2 would result in an initial impact on the NRC staff and industry during the development of appropriate standards and guidelines. Licensees would also incur ongoing costs associated with training and maintaining qualified adversary team members. NRC would incur some costs associated with revising appropriate inspection guidance to validate licensee actions.

Alternative 3 would result in an impact similar to Alternative 2 associated with the development of appropriate standards and guidelines. In addition, Alternative 3 would result in a higher cost to the individual licensees than current expenditures as a result of training requirements and periodical adversary team member assignments to the licensee community in support of the national adversary pool. It is projected that the cost associated with Alternative 3 to the industry as a whole would be high initially and then level off over time at a cost above current resource expenditures. This initial cost would include the cost to provide adversary training to the national pool of adversaries and the execution of FOF exercises (estimated at a total cost of 12 man weeks per licensee, 2 adversaries per licensee would receive 2 weeks of training plus support two site visits of two weeks each per adversary). Alternative 3 would have the lowest direct impact on licensee resources during FOF exercises. Eliminating the need for the individual licensees to provide the entire adversary team, as well as other logistic and administrative burdens, would reduce the impact on a site during FOF evaluation. The ongoing

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costs associated with periodic retraining and qualification also should be less than Alternative 2 as they will be shared by the industry. The NRC would incur some cost associated with revising appropriate inspection guidance to validate licensee action.

Alternative 4 and 5 - While licensee direct resources would be reduced during the exercises licensee cost may increase as a result of incurred NRC fees. These alternatives would require the highest investment of NRC resources. Alternative 4 and 5 costs for the development and maintenance of adversary teams are estimated annually at 25 FTE and \$500,000 in training, travel, and other costs. Alternative 5 may not be practical due to the availability of other federal resources.

These alternatives have been discussed with the industry Security Working Group. Industry representatives have not yet fully defined a position on this issue. However, NEI representatives have stated a concern that under Alternative 3, an adversary force could, in their opinion, exceed DBT-based capabilities over time.

## <u>CONCLUSION</u>

The NRC staff has concluded that Alternative 3 is the preferred alternative when measured against the decision criteria described in this paper, and provides additional secondary benefits, including relieving individual licensees of the burden and expense of staffing and training the entire adversary force, provides an avenue for lessons learned from specific exercises to be shared across the industry, and is better aligned with the NRC's regulatory role, as compared to the more direct agency involvement envisioned in Alternatives 4 and 5. Alternative 3 also eliminates a perception of "the regulator versus the regulated" and potential criticism of a lack of objectivity by NRC or NRC-sponsored teams. Additionally, there is no increased cost to the NRC under Alternative 3 beyond staff time associated with guidance and standards development and their validation.

# **RECOMMENDATION:**

The staff recommends that the Commission approve Alternative 3. This would require the development and implementation of a process, including continued dialog between the staff and industry, for establishing adversary force standards and guidelines to be used by the industry to establish and train a pool of personnel for the adversary force cadre.

#### **COORDINATION:**

The Office of the General Counsel has reviewed this document and has no legal objections. The Office of the Chief Financial Officer has reviewed this paper for resource implications and has no objections.

William D. Travers Executive Director for Operations Commissioners' completed vote sheets/comments should be provided directly to the Office of the Secretary by COB December 18, 2003.

Commission Staff Office comments, if any, should be submitted to the Commissioners NLT <u>December 11, 2003</u>, with an information copy to the Office of the Secretary. If the paper is of such a nature that it requires additional review and comment, the Commissioners and the Secretariat should be apprised of when comments may be expected.

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